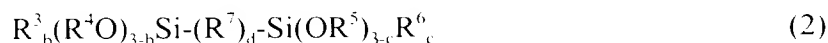


3. (Amended) The process as claimed in claim 1, wherein the siloxane compound is a product of the hydrolysis and/or condensation of at least one compound selected from the group consisting of compounds represented by the following formula (1):



wherein R^1 represents a monovalent organic group or a hydrogen atom; R^2 represents a monovalent organic group; and a is an integer of 0 to 2,

and compounds represented by the following formula (2):



wherein R^3 , R^4 , R^5 , and R^6 may be the same or different and each represents a monovalent organic group; b and c may be the same or different and each is an integer of 0 to 2; R^7 represents an oxygen atom or a group represented by $-(CH_2)_n-$, wherein n is 1 to 6; and d is 0 or 1.

6. (Amended) The process as claimed in claim 1, wherein the electron beam irradiation is conducted at an energy of from 0.1 to 50 keV.

Please add new Claims 16 as follows:

--16. (New) The process as claimed in claim 1, wherein the irradiation dose is from 1 to 200 $\mu C/cm^2$,--

SUPPORT FOR THE AMENDMENT

This Amendment amends Claims 1, 3 and 6; and adds new Claim 16. Support for the amendments is found in the specification and claims as originally filed. In particular, support for Claim 1 is found in original Claim 6 and in the specification at least at page 25, line 27 to page 26, line 1. Support for new Claim 16 is found at least in Examples 5 and 12 in Tables 1

Upon entry of these amendments, Claims 1-16 will be pending in this application.
Claim 1 is independent.

REQUEST FOR RECONSIDERATION

Applicants respectfully request entry of the foregoing and reexamination and reconsideration of the application, as amended, in light of the remarks that follow.

Applicants thank the Examiner for the courtesies extended to their representative during the March 27, 2002, personal interview.

Claim 3 is objected to because "Is" should be replaced with --is--. Claim 3 is amended accordingly. Thus, the objection to Claim 3 should be withdrawn. Applicants respectfully request reconsideration and withdrawal of the objection.

Claims 1-7 and 9-15 are rejected under 35 U.S.C. §102(e) or, in the alternative, under 35 U.S.C. §103(a) over U.S. Patent No. 6,177,143 ("Treadwell"). In addition, Claim 8 is rejected under 35 U.S.C. §103(a) over Treadwell. Applicants respectfully traverse these rejections because Treadwell fails to disclose, teach or suggest the independent Claim 1 limitation of irradiating a film with electron beams "at an irradiation dose of from 1 to 500 $\mu\text{C}/\text{cm}^2$ ".

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. MPEP §2131. To establish a *prima facie* case of obviousness, the prior art reference must teach or suggest all the claim limitations. MPEP §2143.

The present invention provides a process for producing an insulating film which has an excellent balance between dielectric constant and mechanical strength and is suitable for

present invention provides a process for producing a silica-based film which comprises irradiating a film comprising at least one siloxane compound with electron beams. Specification at page 3, lines 5-8. When the electron beam irradiation is conducted in an irradiation dose of from 1 to 500 $\mu\text{C}/\text{cm}^2$, the siloxane compound can be reacted throughout the coating film while minimizing damage to the coating film. Specification at page 26, lines 7-10.

In contrast to the claimed invention, Treadwell discloses electron beam cured siloxane dielectric films cured by a wide beam electron beam exposure. Treadwell at Abstract. Treadwell discloses doses will fall into the range of about 500 to about 100,000 $\mu\text{C}/\text{cm}^2$. Treadwell at column 7, lines 22-24. Treadwell discloses examples with processing conditions using electron beam doses of 6,000 and 8,000 $\mu\text{C}/\text{cm}^2$. Treadwell at Table 1.

However, because Treadwell fails to exemplify an electron dose of 500 $\mu\text{C}/\text{cm}^2$ and Treadwell's examples disclose a minimum electron dose of 6,000 $\mu\text{C}/\text{cm}^2$, which is over an order of magnitude larger than the recited range of "1 to 500 $\mu\text{C}/\text{cm}^2$ ", Treadwell fails to suggest the independent Claim 1 limitation of irradiating with electron beams "at an irradiation dose of from 1 to 500 $\mu\text{C}/\text{cm}^2$ ".

Thus, Treadwell fails to disclose, teach or suggest all the limitations of the claimed invention and fails to have rendered obvious the claimed invention. Therefore, the rejections over Treadwell should be withdrawn. Applicants respectfully request reconsideration and withdrawal of the rejections.

New Claim 16 is further patentably distinguishable over the cited prior art because the cited prior art fails to suggest the Claim 16 limitation that "the irradiation dose is from 1 to 200 $\mu\text{C}/\text{cm}^2$."

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

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